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09/711,054

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Brian Branscomb

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EXAMINER

ADAMS, JONATHAN R

ART UNIT

PAPER NUMBER

2134

DATE MAILED: 06/17/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/711,054

Applicant(s)

BRANSCOMB ET AL.

Examiner

Jonathan R Adams

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 November 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) _____ is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-29 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. Claim 27 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
2. Claim 27 recites the limitation "retrieving a current set of identifiers" two times. It is unclear as to if there are multiple sets being retrieved.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-6, 12-21, 25, 26, and 28 rejected under 35 U.S.C. 102(b) as being preceded by Sistanizadeh et al., US Patent No 5790548 (hereafter referred to as '548).
5. As to claim 1:
'548 teaches a method for managing a telecommunications network using authentication of a set of stored identifiers comprising:
Management system retrieving a current set of identifiers from a network device,
authenticating an identity of the network device using the current set of identifiers / the

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DHCP server receives the request, authenticates the requesting computer based on its MAC address (Col 9, Line 64, '548)

6. As to claim 2:

Management system comprises a network management system / DHCP Server (Col 9, Line 64, '548)

7. As to claim 3:

Management system comprises a command line interface / Networks run on Network operating systems such as UNIX (Col 18, Line 48, '548)

8. As to claim 4:

Connecting the management system to the network device using a network address / DHCP Server provides customers with a temporary IP address (Col 9, Line 59, '548)

9. As to claim 5:

Network address comprises an IP address / DHCP Server provides customers with a temporary IP address (Col 9, Line 59, '548)

10. As to claim 6:

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- Detecting a request to add the network device to the telecommunications network / a computer broadcasts a DHCP request in the LAN asking for an IP address (Col 9, Line 62, '548)
- Retrieving an initial set of identifiers from the network device / DHCP server engages in an initial exchange with the customer (Col 10, Line 33, '548)
- Storing the initial set of identifiers in a storage unit accessible by the management system / It is inherent to the invention of '548 that the MAC address be stored on the DHCP server during the information exchange
- Comparing the retrieved current set of identifier s with the stored initial set of initial identifiers / Authenticating the identify of the network device if at least one of the retrieved current identifiers matches one of the stored initial identifiers / Authenticates the requesting computer based on its MAC address (Col 9, Line 64, '548)

11. As to claim 12:

Detecting a request to add the network device to the telecommunications network / a computer broadcasts a DHCP request in the LAN asking for an IP address (Col 9, Line 62, '548)

- Retrieving an initial set of identifiers from the network device / DHCP server engages in an initial exchange with the customer (Col 10, Line 33, '548)

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- Converting the initial set of identifiers into a first composite value / the user may encrypt his/her information and send it to the authenticated server (Col 11, Line 34, '548)
- Storing the first composite value in the storage unit / It is inherent to the invention that the authenticated server store the received composite value be stored in some form
- Dividing the first composite value by one of the retrieved identifiers / Public key encryption and authentication using MD5 (Col 11, Line 28, '548), DHCP packet contains user name, MAC Address, and Public key/Private key (Col 12, Line 53, '548)
- Converting the remaining retrieved identifiers into a second composite value / the authenticated server decrypts the information (Col 11, Line 35, '548)
- Comparing the division result to the second composite value / Authenticating the identify of the network device if at least one of the division results matches one of the second composite values / Authenticates the requesting computer based on its MAC address (Col 9, Line 64, '548)

12. As to claim 13:

Identifiers comprise physical identifiers / The MAC address is a physical address on the Ethernet card (Col 10, Line 28, '548)

13. As to claim 14:

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Identifiers comprise logical identifiers / Customer name and password (Col 10, Line 33, '548)

14. As to claim 15:

Identifiers comprise physical and logical identifiers / Based on MAC address, Login and Password (Col 10, Line 34, '548)

15. As to claim 16:

Physical identifiers comprise MAC addresses / The MAC address is a physical address on the Ethernet card (Col 10, Line 28, '548)

16. As to claim 17:

Physical identifiers comprise internal addresses used for communication over the internal bus / The MAC address is a physical address on the Ethernet card (Col 10, Line 28, '548)

17. As to claim 18:

Physical identifiers comprise MAC addresses / The MAC address is a physical address on the Ethernet card (Col 10, Line 28, '548)

18. As to claim 19:

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Physical identifier is associated with a card within the network device / The MAC address is a physical address on the Ethernet card (Col 10, Line 28, '548)

19. As to claim 20:

Each of the physical identifiers comprises a serial number for the associated card / The MAC address is a physical address on the Ethernet card (Col 10, Line 28, '548)

20. As to claim 21:

Physical identifiers further comprise a part number for the associated card / The MAC address is a physical address on the Ethernet card (Col 10, Line 28, '548)

21. As to claim 25:

Current set of identifiers comprise two identifiers / Based on MAC address, Login and Password (Col 10, Line 34, '548)

22. As to claim 26:

Current set of identifiers comprises more than two identifiers / Based on MAC address, Login and Password (Col 10, Line 34, '548)

23. As to claim 28:

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Connecting a management system to a network device using network address assigned to the network device / Network transports TCP/IP to between the Information Providers and customer terminals (Col 3, Line 55, '548)

Management system retrieving a current set of identifiers from a network device, authenticating an identity of the network device using the current set of identifiers / the DHCP server receives the request, authenticates the requesting computer based on its MAC address (Col 9, Line 64, '548)

Claim Rejections - 35 USC § 103

24. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

25. Claims 7 and 29 rejected under 35 U.S.C. 103(a) as being unpatentable over '548.

As to claim 7:

26. '548 teaches a method for managing a telecommunications network using authentication of a set of stored identifiers. '548 further teaches the capability of having multiple versions of one identifier type (Col 11, Line 6, '548). '548 does not specifically teach updating the stored initial set of identifiers with any of the retrieved current identifiers that do not match the stored initial identifiers. The examiner takes official notice as to add/change computer account information identifiers (such as MAC

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address) by use of the user name and password. It would have been obvious to a person of ordinary skill in the art at the time of invention to add/change computer account information identifiers (such as MAC address) by use of the user name and password. One of ordinary skill in the art would have been motivated to add/change computer account information identifiers (such as MAC address) by use of the user name and password because it is very common to use a user name and password to change account information. Examples of this include services controlled from the web such as web sites for cell phone service providers, web sites for bank account information, etc.

As to claim 29:

27. '548 teaches a method for managing a telecommunications network using authentication of a set of stored identifiers. '548 further teaches the capability of having multiple versions of one identifier type (Col 11, Line 6, '548). '548 does not specifically teach updating the stored initial set of identifiers with any of the retrieved current identifiers that do not match the stored initial identifiers. The examiner takes official notice as to add/change computer account information identifiers (such as MAC address) by use of the user name and password. It would have been obvious to a person of ordinary skill in the art at the time of invention to add/change computer account information identifiers (such as MAC address) by use of the user name and password. One of ordinary skill in the art would have been motivated to add/change computer account information identifiers (such as MAC address) by use of the user

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name and password because it is very common to use a user name and password to change account information. Examples of this include services controlled from the web such as web sites for cell phone service providers, web sites for bank account information, etc.

28. Claims 8 and 9 rejected under 35 U.S.C. 103(a) as being unpatentable over '548 in view of "NetLinker FAQ".

As to claim 8:

29. '548 teaches a method for managing a telecommunications network using authentication of a set of stored identifiers. '548 does not teach posting a user notification indicating failed authentication if at least one of the retrieved current identifiers does not match one of the stored initial identifiers. NetLinker FAQ teaches an Internet service provider rejection response message. It would have been obvious to a person of ordinary skill in the art at the time of invention to use a rejection response message as in NetLinker with the service provider authentication in '548. One of ordinary skill in the art would have been motivated to use a rejection response message as in NetLinker with the service provider authentication in '548 because it is helpful to the user to know if authentication has failed, so that the user may then retry to authenticate.

As to claim 9:

30. '548 teaches a method for managing a telecommunications network using authentication of a network device identifier (MAC address) (Col 9, Line 64, '548). '548 further teaches the capability of having multiple versions of one identifier type (Col 11, Line 6, '548). '548 does not specifically teach updating the stored initial set of identifiers with any of the retrieved current identifiers. The examiner takes official notice as to add/change computer account information identifiers (such as MAC address). It would have been obvious to a person of ordinary skill in the art at the time of invention to add/change computer account information identifiers (such as MAC address). One of ordinary skill in the art would have been motivated to add/change computer account information identifiers (such as MAC address) because it is very common for service providers to allow users to change account information. Examples of this include services controlled from the Internet such as web sites for cell phone service providers, web sites for bank account information, etc.

31. Claims 10 and 11 rejected under 35 U.S.C. 103(a) as being unpatentable over '548 in view of "NetLinker FAQ" in further view of "TCP/IP Networking Concepts".

As to claim 10:

32. '548 as modified above teaches a method for managing a telecommunications network with DHCP using authentication of a set of stored identifiers where new user devices may be added. '548 as modified above does not teach using static IP addressing in the network protocol for detecting a device on the network and updating a record associated with the network device with new network addresses. "TCP/IP

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Networking Concepts" teaches using static IP addressing as an alternative to DHCP networking for detecting a device on the network and updating a record associated with the network device with new network addresses (Page 1, Line 16, "TCP/IP Networking Concepts"). It would have been obvious to a person of ordinary skill in the art at the time of invention to modify the invention of '548 as modified above to use static IP addressing as an alternative to DHCP networking. One of ordinary skill in the art would have been motivated to modify the invention of '548 as modified above to use static IP addressing as an alternative to DHCP networking because Static IP addressing provides an orderly procedure for adding new devices (Page 1, Line 16, "TCP/IP Networking Concepts").

As to claim 11:

Storing the initial set of identifiers comprises adding the identifiers to an administration managed device table / It requires that all addresses are recorded and centrally maintained by a network administrator (Page 1, Line 16, "TCP/IP Networking Concepts").

33. Claim 22-24 rejected under 35 U.S.C. 103(a) as being unpatentable over '548 in view of Ichimi et al., US Patent No 6059446 (hereafter referred to as '446).

As to claims 22-24:

34. '548 teaches a method for managing a telecommunications network using authentication of a network device identifier (MAC address) comprising:

- Reading the current set of identifiers from a plurality of non-volatile memories on a plurality of cards within the network device / Some computers may have 2 Ethernet cards, each with their own identifier ...(Col 11, Line 13,'548)

'548 does not specifically state that the MAC address should be stored in non-volatile read-only registers. '446 teaches a LAN controlling unit which stores a MAC address in a ROM registers (Col 1, Line 26, '446). It would have been obvious to a person of ordinary skill in the art at the time of invention to store the MAC address in read-only registers as in '446 in the invention of '548. One of ordinary skill in the art would have been motivated to store the MAC address in read-only registers as in '446 in the invention of '548 because it presents accidental alteration to the MAC address that could lead to a malfunction in the network.

Conclusion

35. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jonathan R Adams whose telephone number is (703) 305-8894. The examiner can normally be reached on Monday – Friday from 10am to 6pm.

36. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory Morse, can be reached on (703) 308-4789. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.


GREGORY MORSE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100